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FOREST MANAGEMENT IN CANADA







**FOREST MANAGEMENT IN CANADA**

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## FOREST MANAGEMENT IN CANADA\*

### ISSUE DEFINITION

Canada is at the crossroads in forest management. Our country's forests have suffered from lack of adequate reforestation and failure to implement appropriate silvicultural practices, and now they can scarcely meet the growing needs of their users. Viewed from a primarily economic standpoint for many years, forest management now aims at identifying objectives and strategies through a concerted effort by all forest users. As the concept of sustainable development suggests, we must now, more than ever, work to ensure the sustainable utilization of species and ecosystems, if humanity intends to provide for the well-being of present and future generations. This document describes changes and developments in forest management on a national scale.

### BACKGROUND AND ANALYSIS

#### A. Overview

From earliest times, the forest has been associated with mankind's progress. A special place for leisure and relaxation, the forest also provides fuel for our fires, timber for our buildings, food for our tables and, of course, spectacular beauty. Canada has the third largest expanse of forest of any country in the world: it is the classic example of a nation whose development was largely brought about by its rich forest resources. But in recent years, growing public awareness about the environment has revived and expanded debate on problems linked to changes and deterioration in our forests.

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\* The original version of this Current Issue Review was published in January 1987; the paper has been regularly updated since that time.



Viewed not long ago as an inexhaustible resource, Canadian forests, in addition to being threatened to varying degrees by air-borne pollutants, are today being intensively harvested. They have faced repeated assaults by natural scourges such as fire, insects and disease. **The latest data available show that between 1990 and 1994, the forest industry harvested a total of 4.6 million hectares. During the same period, forest fires destroyed 11.6 million hectares, including 2.1 million hectares of productive wooded areas. Over the 15-year period from 1979 to 1993, fires, insects and disease affected an area of commercial forest that was greater than the area harvested. Natural disturbances destroyed an average of 1.1 million hectares per year, while 887,000 hectares were cut each year. In terms of volume of timber, the opposite is true: 163 million cubic metres were harvested annually, while 137 million cubic metres were lost due to natural phenomena. Also during this period, 4.8 million hectares were planted or seeded, but the total area of forest lands still devoid of commercial species more than 10 years after being harvested increased from 1.1 to 2.5 million hectares, which represents approximately 1% of commercial forests.**

Faced with this situation, forest industries and forestry experts emphasize their disquiet by pointing primarily to the economic importance of Canada's commercial forests. **In 1995, these forests provided some 880,000 direct and indirect jobs, injected more than \$40 billion into the Canadian economy and ensured the survival of some 350 municipalities in Canada.** This perspective, focused on the forest as industry, must not allow us to neglect the intrinsic ecological value of forest ecosystems. To reduce the value of a forest to no more than its lumber content is to simplify absurdly its invaluable role as an environment for life: quite apart from the importance of the flora and fauna they shelter, forests contribute directly to the purification of the air we breathe and the water we drink; they protect river basins from erosion, regulate the flow of water courses and reduce the risk of floods. Canada's forests also help to control the excess carbon dioxide in the world's atmosphere; it is estimated that they absorb more CO<sub>2</sub> from the atmosphere than is emitted by natural phenomena and industrial activity. Nowadays the classic principle of the single-use forest has been replaced by the idea of multiple use, an idea that is being expressed with increasing persuasiveness. Apart from wood shortages, such



phenomena as loss of soil fertility, reduced ecosystem diversity and the destruction of productive habitats are all evidence of the fragility of this great natural resource.

The days when we carelessly expected our forests to give us something for nothing are long gone; the industry, governments and many other stakeholders are combining their efforts to ensure that the principle of sustainable utilization of forest resources is given top priority, both nationally and internationally.

## B. Description of the Resource

Canada has 4.16 million square kilometres of forest, or around 155,000 square metres of forest for each of its 29 million inhabitants. More than twice as big as the area of the European Economic Community, and nearly double the surface area of Mexico, Canada's forested territory accounts for 10% of the planet's woodlands. However, our forests are far from being all profitable and available for exploitation: only 2.3 million square kilometres are considered to be productive and non-reserved. British Columbia, Ontario and Quebec contain about 59% of Canada's inventoried productive forest land. The prairie provinces have 23%, and the four Atlantic provinces 9%. Most (80%) of this territory is Crown land in right of the provinces, except in Nova Scotia and Prince Edward Island, where most forest land is privately held. Federal Crown land, located mainly in the Yukon and the Northwest Territories, accounts for 39% of the country's total area but for only 9% of its total productive non-reserved forest land.

Canada's forested areas are classified by type of cover, which is determined by the proportion of conifers (in terms of surface area or volume). The softwood (coniferous) forests, concentrated mainly in the north and predominant in British Columbia, are the largest in terms of both surface area (64%) and volume (77%). Mixed-wood forests, which extend through the Maritimes, Central Quebec, Ontario and the Prairies, rank second in area (21%) and in volume (18%). Hardwood forests (mainly birch and maple) grow in a band across southern Ontario and Quebec; the band thins in southern Manitoba and Saskatchewan and widens again in Alberta, mostly in the form of aspen and poplar. Classification of timber stands according to their development potential remains a challenge both urgent and important.



### C. Subjects for Inquiry and Debate

The debate on the management, use, protection and increased productivity of forest lands. These included problems in the supply of wood, as well as in the processing and marketing of forest products. In the same way, we find provincial governments, private companies and professional forestry associations echoing the concerns of native groups and owners of private forests about the seriousness of a large number of problems and the urgent need to safeguard our forests through intensive protection and management. Pests and fires, air pollution and deforestation, are all factors that suggest the future may not be a bright one.

An unusual die-back in maple-sugar bushes throughout Quebec is one disturbing example. Fewer, paler leaves, together with their premature loss, gradual decrease in foliage, the slower scarring of incisions, decreased growth and increased die-off may be linked to stress caused by air-borne pollutants (acid build-up, photochemical oxidizers, etc.) and to severe climatic variation (for example, the deep-level freezing in winters with minimal snow falls, and periods of low rainfall observed in the early 1980s). In addition to sugar maples, which are very vulnerable to pollution, white ash, beech, linden, yellow birch and red maple also suffer from die-back. Coniferous species can no longer be said to be unaffected: early signs of the blight have been found in fir, white spruce and hemlock. While the situation has stabilized and the role of air pollution is hotly debated, a number of observers stress that the impact of air-borne pollutants can no longer be ignored. Certainly research must continue, so that we can identify and implement all possible measures to improve the health of the forest heritage, but we must also act.

International and domestic demand for wood and wood products increases as population increases. In Canada, the annual allowable cut (AAC), i.e., the volume of wood that can be harvested without endangering the sustainability of the forest resource, had dropped from 276 million cubic metres in 1977 to 207 million in 1983. In 1994, the AAC was 230 million cubic metres, or 175 million cubic metres of softwood and 55 million cubic metres of hardwood. In 1994, the roundwood harvest totalled 182 million cubic metres, including 154 million cubic metres of softwood and 28 million cubic metres of hardwood. Over 37 million cubic metres of wood were harvested on private land. It is estimated that Canada



harvested 87% of its AAC in softwood and 35% of its AAC in hardwood. While hardwood supplies do not appear to be in any way threatened, the Canadian Forestry Service considers that at the current cutting rate, the softwood harvest is reaching the upper limit for sustainable development.

Already, local shortages of softwood used primarily for the production of lumber have been noted, primarily in Newfoundland and New Brunswick, but these shortages will probably be short-lived. It remains extremely difficult to estimate what Canada's wood supply will be over the long term, because it depends to a very great extent on a range of factors such as the effort put into renewing our forests and technological advances that may make possible a more efficient use of wood resources and open up currently inaccessible forests. Nevertheless, it is possible to envision a variety of options that would make it possible to increase the wood supply, including: access to remote forest areas, more intensive management and silviculture of forests and plantations, increased protection of forests against natural loss, more efficient use of wood and wood waste in processing, particularly in the case of hardwoods, and greater use of paper recycling. Each option, of course, has its own economic and environmental advantages and disadvantages. In light of the changing pressures on the forests and the commitment made by the various stakeholders to manage them sustainably, any new direction must ensure that forest ecosystems and their related values are maintained, while at the same time taking into consideration the social context, employment, local communities and native rights. The result might be that some provinces lower the AAC, primarily for softwood, even though over the past 15 years there has been a marked increase of 940 million cubic metres in the volume of commercial standing timber, an annual increase of 63 million cubic metres. There can be no dispute about the fact that hardwoods are under-utilized, however, with their combined harvest of just over one-quarter of the AAC.

Important subjects like the recycling of newsprint and the cutting methods used in forestry are arousing a great deal of interest among both managers and users of our forests. Indeed, in the United States, nearly all states have already tabled legislation requiring a minimum proportion of recycled fibres in newsprint. Already, 15 American states have passed regulations requiring a minimum recycled-fibre content in newspapers or magazines. A further 16 have set



goals for recycled-fibre content, varying from 16 to 50% by the year 2000, without imposing these by regulation. Twenty-seven of these states account for nearly 80% of total American consumption of newsprint. This irreversible trend toward recycling will demand rapid adaptation from the Canadian pulp and paper industry, and from the fledgling recycling industry. In Quebec alone, one plant that de-inks old paper started up operations in 1991, while three others opened in 1992 and two more in 1993. By 1993, Quebec newsprint plants were therefore in a position to produce 735,000 tonnes, 60% of all Canadian newsprint produced from de-inked paper. Forestry Canada had estimated that, by then, nearly 40% of all newsprint in Canada would be produced using recycled fibres, compared with 3% in 1988, and the number of de-inking plants would have risen from 1 to 16. An increased use of recycled fibres has therefore already had serious repercussions for the forest industry itself, and for the resource as a raw material.

## PARLIAMENTARY ACTION

In 1906, Sir Wilfrid Laurier, then Prime Minister, was demanding an end to the destruction of our forests, which were already suffering because they were not being replanted. Deforestation and lack of forest management have at least received increasing attention in recent years. In 1981, with the publication of the *Forest Sector Strategy*, the federal government launched a campaign to intensify forest management. The Strategy was formulated around four major themes: wood supply, marketing, research and development, and manpower. The area it was hoped would be reforested was to grow from 200,000 to 500,000 hectares a year, and the areas for clearing the undergrowth, thinning and fertilization were to expand from 100,000 to 400,000 hectares a year.

It very soon became plain that such a strategy could only be implemented in collaboration with the provinces, industry and private woodlot owners. As a result, agreements with a value in excess of \$1.5 billion have been reached between the federal government and the ten provinces. The purpose of these agreements was to ensure a secure wood supply by increasing reforestation of "not satisfactorily restocked" (NSR) forest lands and by encouraging the application of intensive forest management techniques. By the end of the first agreements, in 1989 and 1990,



about 1.5 billion trees had been planted on more than 800,000 hectares. In addition, 500,000 hectares had been thinned, fertilized and cleared of undesirable flora. The federal-provincial agreements produced significant economic and social benefits. Over the life of this first series of agreements, more than 100,000 direct and indirect jobs were created, primarily in rural areas.

The agreements also provided funding to Research and Development programs which had as their objective to the development of new products, the improvement of species through genetic research, the evolution of new silvicultural techniques, and, in general, an increase in our knowledge of forest management. The Canadian Forestry Service continued to be involved in the problems of fire, insects, diseases and the effect of toxic substances on forest vegetation and soil. In addition, it carried out basic research on forest renewal, forest ecology, and remote sensing. The provinces concentrated primarily on reforestation, classification of forest sites, and training for forest managers. The first series of federal-provincial agreements on forest resource development expired in 1989 and 1990.

Early in the 1990s, the federal government signed a second series of agreements with each of the provinces and, for the first time, with the two territories. These forest resource development agreements totalled nearly \$725 million, which does not include amounts allocated under subsidiary agreements. Unlike the initial agreements, the new federal-provincial/territorial agreements removed the emphasis from reforestation (which is considered primarily the responsibility of the provinces and industry) and placed it instead on the enhancement and development of already established stands.

In the April 1993 budget, the federal government stated that these agreements would not be renewed when they expired. This intention was confirmed in the budget of February 1995; consequently, at the end of 1995-1996 the federal government will withdraw from the direct funding of the development of Canada's forests. This situation is of particular concern to small woodlot owners who, especially in the east, have received very valuable assistance under these agreements, enabling them to set up conditions favourable to the sustainable development of private forests. It has forced the most affected provincial stakeholders to consider new approaches to funding for private forests. For example, after the Quebec summit on the private forest held in May 1995, the various stakeholders agreed on the distribution of funding for private forest



development activities. The Government of Quebec will now defray 60% of the total cost of development work - an expenditure in the order of \$24 million. The industry agreed to pay 20%, or \$8 million, while private producers will continue to pay 15% of the cost, as they did in the past. Finally, the Fédération des Producteurs de Bois du Québec and the Regroupement des Sociétés d'aménagement du Québec (RESAM) have agreed to find the remaining 5%, which amounts to about \$2 million annually. By withdrawing from the federal-provincial/territorial agreements on forest resource development, the federal government is depriving woodlot owners of \$19 million for private forest development in Quebec. A number of participants in the Quebec summit said that the federal government should give the province a lump sum on a one-time basis, with the interest from it to go to fund development activities. The situation is not much different in New Brunswick, where the Federation of Woodlot Owners estimates that the government contributions required to continue development programs in private forests total around \$27 million over five years. In August 1996, the federal and New Brunswick governments agreed on a new forestry management program under which they will invest \$12 million in equal shares over the next three years. This program is solely for the benefit of private woodlot owners, whose contribution to the funding could reach \$3 million over the course of the agreement. The program will stress reforestation, precommercial thinning and cleaning, and other types of forest management operations. The federal government's contribution comes from the \$300-million Transition Fund announced as part of the reform of employment insurance.

One issue of great concern to the federal government over the past 15 years has been lumber exports to the United States. Toward the end of 1986, Canada and the United States signed a memorandum of understanding under which Canada agreed imposed a 15% surtax on its softwood lumber exports to the United States, to compensate for the low stumpage fees charged by the provinces. Over the months that followed the coming into effect of the memorandum, it became possible for the surtax to be replaced with other offsetting measures, such as increased stumpage or the transfer of forest management responsibilities to the industry. The result was that British Columbia (Canada's largest producer) and the Maritimes were no longer taxed, while the tax on Quebec exports was reduced to 6.2% and was scheduled to drop to 3.1% on 1 November 1991. The revenue collected by the federal government was transferred to the provinces so that



they could step up reforestation and develop silvicultural programs. As it was entitled to do under the terms of the bilateral agreement, the Canadian government unilaterally decided to stop collecting the surtax starting on 4 October 1991.

The United States promptly decided to levy a countervailing duty equivalent to the surtax formerly collected by the Canadian government, that is, 0% on softwood lumber from British Columbia and the Atlantic provinces, 3.1% on lumber from Quebec, and 15% for lumber from Alberta, Saskatchewan, Manitoba and Ontario. On 12 December 1991, the United States International Trade Commission concluded, in a preliminary decision, that there was harm to the American lumber industry. In a second ruling, dated 6 March 1992, the United States Department of Commerce considered that softwood lumber from Canada benefited from indirect subsidies equivalent to 14.48% of the price, and imposed an equivalent countervailing duty on all Canadian lumber, regardless of the province of origin. On 15 May 1992, the Department of Commerce made its final ruling; it confirmed that Canadian exports benefited from government subsidies, but it reduced the countervailing duty to 6.51%. Lastly, at the conclusion of its investigation, the International Trade Commission confirmed, in a four-to-two decision handed down on 25 June 1992, that Canadian lumber exports harmed the American industry and thus upheld the 6.51% duty.

The Canadian government asked the GATT to examine the legality of the actions taken by the United States against the Canadian lumber industry; it has also brought this issue before a binational panel established under chapter 19 of the Free Trade Agreement. In May 1993, a special GATT group ruled that the United States had been wrong in imposing sanctions on Canadian softwood exporters and therefore had to reimburse the amount of between \$15 and \$20 million they had paid between October 1991 and March 1992. It considered that the United States could impose countervailing duties, however, as in fact it did at the conclusion of its investigation. On 17 December 1993, the binational panel set up under the Canada-U.S. Free Trade Agreement rejected the reasons given by the U.S. Department of Commerce for imposing countervailing duties of 6.5% on imports of Canadian softwood; the Department agreed to remove these on 6 January 1994. This decision did not, however, prevent the American government from



asking for the establishment of an extraordinary challenge committee to review the decision of the binational panel.

The extraordinary challenge committee, comprising two Canadian judges and an American judge, handed down its ruling on 3 August 1994. In the face of opposition from the American judge, the two Canadian judges ruled that there had been no conflict of interest with respect to two of the Canadian members of the binational panel. It upheld an earlier decision that Canada was not subsidizing softwood lumber exports. This ruling meant that Canadian softwood lumber producers were to be reimbursed about \$800 million in countervailing duties. Barely one month after the extraordinary challenge committee had made its ruling, the U.S. Coalition for Fair Lumber Exports filed an appeal with the U.S. Court of Appeals, alleging that the dispute settlement mechanism provided for in the Free Trade Agreement violates the U.S. Constitution. The Coalition, however, dropped its suit on 15 December 1994, when the governments of Canada and the United States agreed to set up a bilateral consultative process to discuss forest issues and the North American lumber trade. **This process led, in April 1996, to a new Canada-United States Softwood Lumber Agreement, under which the United States made a commitment not to initiate trade proceedings against Canadian softwood lumber exports for the next five years. In return, Canada agreed to levy, at the border, an amount of U.S.\$50 per thousand board feet on the first 650 million board feet exceeding the 14.7 billion-board-foot threshold for deliveries from British Columbia, Quebec, Ontario and Alberta, and an amount of U.S.\$100 on additional quantities. The amounts levied by the Canadian government are to be prorated according to the provinces' respective softwood lumber deliveries to the United States and remitted to the provinces. Average exports from the four provinces affected by this Agreement averaged 12.6 billion board feet over the past three years, but reached a record level of 16.2 billion board feet in 1995, and are worth approximately \$8 billion annually. On 10 September 1996, Canada's Minister of International Trade announced these provinces' respective allocations of the export quota, as is stipulated in the Agreement. Thus, under the new quota system, based on recent exports, British Columbia softwood lumber producers will have 59% of the initial**



allocation, Quebec producers 23%, Ontario producers 10.3%, and Alberta producers 7.7%. These allocations represent an increase of approximately 4% for British Columbia and a 2% reduction for Ontario and Quebec, and are to be reviewed periodically.

In 1987, the Canadian Council of Forest Ministers (CCFM) developed a *National Forest Sector Strategy for Canada*, which recommended the creation of a federal department, to have exclusive responsibility for forests and the forest industry. The federal government implemented this recommendation in 1989 and tabled in the House of Commons Bill C-29, An Act to establish the Department of Forestry, to amend the *Forestry Development and Research Act* and to make related amendments to other Acts. Bill C-29 passed on 1 November 1989 and came into force on 23 February 1990. The new *Department of Forestry Act* was the first piece of federal legislation to introduce and define the concept of sustainable development, which is to guide the orientation and activities of the new Department. In particular, the Act provided that the Minister in cooperation with the provinces and with non-governmental organizations was to ensure that our forest resources were handled in a perspective of sustainable development, while taking into account the Canadian forest sector's competitiveness on the international market. Forestry Canada became an independent department in 1990; however, under the new government structure announced in June 1993, it was integrated into the new Department of Natural Resources and returned to its former name - the Canadian Forest Service. This situation became official with the adoption, on 24 November 1994, of Bill C-48, An Act to establish the Department of Natural Resources and to amend related Acts, which incorporated the main provisions of the 1989 legislation.

In the context of government restructuring and budget cuts, the new Department of Natural Resources announced its primary orientations for the next five years. It intends basically to maintain the same major objectives as were set out by Forestry Canada in the 1990 strategic plan. By providing national leadership and forging solid partnerships, Natural Resources Canada is relying on its economic, scientific and technical expertise to: establish the principles, practices and knowledge required to develop resources according to the concept of sustainable development; enhance the international competitiveness of the resources sector and its environmental performance; and contribute to the improved health and safety of Canadians.



In November 1990, the Sub-Committee on Forestry of the Standing Committee of the House of Commons on Forestry and Fisheries tabled a report containing 24 recommendations concerning the federal government's role in ensuring sustainable forest development. The Sub-Committee particularly stressed that initiatives must lead to cooperation among all segments of the forest sector, from big business to environmental groups and private citizens, not to mention the provinces, which have responsibility for managing and developing the forest resource. Among the proposed initiatives, the Sub-Committee recommended that the CCFM draft a national, long-term strategy for sustainable forest development to be confirmed by the signing of a *Canadian Forestry Agreement*.

In light of the interest raised by the concept of sustainable development, the increased importance of environmental issues and the changing public attitude toward natural resources management, and after consulting many organizations and individuals ultimately involved in the management of Canada's forests, the CCFM presented the new National Forest Strategy, entitled *Sustainable Forests: A Canadian Commitment*, in March 1992. The goal of this strategy is "to maintain and enhance the long-term health of our forest ecosystems, for the benefit of all living things both nationally and globally, while providing environmental, economic, social and cultural opportunities for the benefit of present and future generations." The strategy has nine elements, which address all aspects of the production, use and management of Canada's forests. These directions, which are intended to be a framework for making the forest vision expressed by all stakeholders at the public consultations a reality, are presented as follows:

- 1) Forest stewardship: the forest environment;
- 2) Forest stewardship: forest management practices;
- 3) Public participation: expanding the dialogue;
- 4) Economic opportunities: a changing framework;
- 5) Forest research: a team approach;
- 6) The work force: the demands are growing;
- 7) Aboriginal people: a unique perspective;
- 8) Private forests: a growing opportunity;
- 9) Our forests: the global view.



In order to reinforce the impact of the new strategy, the federal, provincial and territorial members of the CCFM, as well as representatives of industry, labour, private owners, aboriginal people, the universities, professionals and environmental groups, signed the *Canada Forest Accord* as the sub-committee had suggested. By signing the agreement, the parties not only endorsed the National Forest Strategy and its fundamental objective of commitment toward forest sustainability, they also committed themselves to taking a series of measures that will ensure its implementation.

The *Department of Forestry Act* required the Minister to report annually to the House of Commons on the state of forestry in Canada. Since 1991, six annual reports on *The State of Forestry in Canada* have been tabled in the House and have provided a very specific picture of forestry resources and the industry, at the provincial, national and international levels. These six reports provide specific and valuable information on a variety of themes related to forests and the forest industry, including biodiversity, wood supply, paper recycling, relations between trade and the environment, scientific and technological developments, government initiatives such as the model forests network and the community-based tree planting program, the opinions of professionals and Canadians in general on various aspects of forest management, and international considerations affecting forestry.

Forestry Canada's second report to the Parliament of Canada, tabled in June 1992, was very innovative in introducing a new descriptive terminology of Canada's forests as well as a series of environmental, economic and social indicators. There are 12 indicators: the environmental indicators deal with forest diversity and productivity, protected areas, and the quality of the environment and the contribution of Canada's forests to it; the economic and social indicators deal with sustainable economic benefit, industry competitiveness, efficient use of wood, control of forest resources, employment and community stability, public involvement, and access to recreation in the natural environment. The purpose of these indicators, like that of better-known indicators such as the Consumer Price Index and the Gross National Product, was to provide a quantitative index, in this case of the management of forest resources in Canada. Although they cannot say everything about the performance of Canada's forest industry, they nevertheless provided a means of monitoring the progress of measures and actions taken to ensure that the environmental, economic and social values associated with Canada's forests are upheld.



In the 1992 and 1993 reports, its third and fourth, Forestry Canada provided an update on the general state of Canada's forests and the Canadian forestry industry. The section on environmental, economic and social indicators continued to be an excellent means of assessing the sustainable development of Canadian forests. The fourth report, tabled in June 1994, included 14 indicators resulting from the cooperative effort of sector players to develop a more complete list of criteria. In addition to adjustments to the 12 indicators contained in previous reports, the report mentioned new considerations, such as the impact of forests on Canadian culture and the participation of native people in forest management. The fifth report, tabled in the summer of 1995, showed that Canadian efforts with respect to the indicators of sustainable development had finally borne fruit. The Canadian Council of Forest Ministers approved a national framework of criteria and indicators based on earlier experience. The Canadian framework identifies six principal sustainable forest management criteria: conserving biodiversity; maintaining and enhancing forest ecosystems; conserving soil and water; contributing to global ecological cycles; providing multiple benefits to society; and accepting society's responsibility for sustainable development. **Each criterion is subdivided into a number of elements to highlight a particular aspect, which can then be measured according to one of 84 specific indicators, some of which are discussed in the fifth and sixth reports.** The national framework in this regard is particularly important. Already, Canada and nine other countries, which together manage 90% of the world's boreal and temperate forests, have completed the development of a complete set of criteria and indicators. Ultimately, this method of measuring each country's progress toward sustainable forest development will probably be the focal point of national and international certification programs currently under development for forestry practices and products.

On 21 June 1994, the House of Commons Standing Committee on Natural Resources tabled its report *Canada: A Model Forest Nation in the Making*. The report, which focused on issues related to clear-cutting, gave a fairly broad analysis of the overall integrated management of Canadian forests. The Committee examined different harvesting methods and defined the federal government's role in relation to the practices and initiatives already in place or scheduled. It concluded that, from an ecological standpoint, clear-cutting is appropriate for most types of forests in Canada; however, this is not to say that this practice should be applied



everywhere, or that there is no room for improvement. On the contrary, the Committee believed that the overall area of clear-cut forest should be reduced, and that there should be a new focus on environmental characteristics and natural phenomena.

The Committee also called for a review of the feasibility of applying the concept of natural landscape forest management to the development of Canada's forests. Furthermore, it recommended that the Canadian Forestry Service assume a broader leadership role in the many areas where it is already an active player, for example, R&D, communications in Canada and abroad, public awareness, national data collection and the establishment of sustainable development indicators. More specifically, the Committee called on the federal government to support unconditionally the process of certifying Canadian forestry practices and products under development; it also recommended that federal-provincial-territorial agreements respecting the development of forestry resources be renewed for an additional period of five years.

Nevertheless, the current state of Canada's forests and their importance for the community on the economic, social and environmental levels dictate that intensive action must be taken by all to ensure that sustainable development practices with respect to this renewable resource are implemented as we head into the 21st century. Some concrete initiatives have already been implemented by the federal government. For example, a network of 10 model forests, representing each of Canada's forest regions, has been set up, and the National Community Tree Planting Program, Tree Plan Canada, whose ultimate objective is to have 325 million trees planted in urban and rural communities across Canada, has been launched. The federal government has also adopted new pulp and paper mill effluent regulations aimed at considerably reducing pollutants contained in effluents and eliminating all traces of dioxins and furans by 1994. On the international front, Canada was quick to sign the biodiversity convention at the United Nations Conference on the Environment and Development, held in Brazil in June 1992, and always takes the lead in promoting a similar convention on forests.

Despite all the efforts made and the progress achieved over the past few years in forest management in Canada, certain challenges remain - the primary one being to ensure a balance between maintaining a natural forest and the ambition to make the forest as productive as possible by managing it very intensively, as the Scandinavian and European countries have done,



frequently to the detriment of nature and its incomparable diversity. Although they have been profoundly changed by human intervention over the past 175 years, Canada's forests are still in relatively natural condition. They are so extensive that Canada will probably be able to keep them this way for the benefit of their users and the environment.

## CHRONOLOGY

- 1899 - The Canadian Forestry Service (CFS) was set up.
- 1900 - The Canadian Forestry Association was set up; it later became a national federation of independent forestry associations across Canada.
- December 1979 - The *Federal Policy on the Canadian Forestry Sector* was published.
- 1980 - Responsibility for administering the Canadian Forestry Service was entrusted to an Assistant Deputy Minister at Environment Canada.
- September 1984 - The portfolio of Minister of State (Forests) was created, and the CFS was transferred to Agriculture Canada.
- June 1986 - The House of Commons Standing Committee on the Environment and Forestry tabled its first report, entitled *Forest Resources and Industries in Eastern Canada*. The report included 27 recommendations, including one urging the government to envisage the creation of a federal Department of Forestry in the near future.
- December 1986 - An agreement negotiated by representatives of the Canadian and American governments entails the imposition by the Canadian government of a tax of 15% on the softwood lumber exported to the United States.
- July 1987 - A new National Forest Sector Strategy for Canada reflecting the views of a great many individuals and organizations connected with forestry, was published under the auspices of the Canadian Council of Forest Ministers.
- May 1988 - The Standing Committee on Environment and Forestry devoted an entire day to public hearings on the question of wildlife objectives in forest management.

- 1 November 1989 - Bill C-29, creating a Department of Forestry, was passed by the House of Commons.
- 23 February 1990 - The new *Department of Forestry Act* came into force.
- August 1990 - The 21st International Union of Forestry Research Organizations World Conference, which regrouped almost 2,000 forestry research delegates and scientists, was held in Montreal.
- November 1990 - The Standing Committee of the House of Commons on Forestry and Fisheries tabled a report prepared by the Sub-Committee on Forestry entitled *Forests of Canada: The Federal Role*. The report contains 24 recommendations aimed at defining and structuring the mission, mandates and initiatives of the new Forestry Department.
- April 1991 - Forestry Canada tabled in Parliament its first annual report on the State of Forestry in Canada. As required by the *Department of Forestry Act*, this and subsequent annual reports will inform Canadians about the health of their forests and provide them with insight into the concerns and policies of the federal government.
- September 1991 - The federal government announced that it was unilaterally withdrawing from the memorandum of understanding on softwood lumber exports to the United States signed on 30 December 1986. It would therefore be ceasing to collect the 15% surtax on softwood lumber exports to that country.
- March 1992 - At the National Forestry Congress in Ottawa, the CCFM adopted a new National Forestry Strategy entitled *Sustainable Forests: A Canadian Commitment*; members of the CCFM and a number of forest sector representatives signed the *Canada Forest Accord*.
- June 1992 - After investigations and analyses, the United States Department of Commerce levied a 6.51% countervailing duty on softwood lumber from Canada.
- June 1993 - Under the new government structure announced by Prime Minister Kim Campbell, Forestry Canada and Energy, Mines and Resources were combined to make a new Department of Natural Resources.
- December 1993 - The binational panel set up under the Canada-U.S. Free Trade Agreement rejected the reasons given by the U.S. Department of Commerce for imposing countervailing duties of 6.5% on softwood imports from Canada. The duty was removed on 6 January 1994.



- June 1994 - The House of Commons Standing Committee on Natural Resources tabled a report entitled *Canada: A Model Forest Nation in the Making*.
- 24 November 1994 - Bill C-48, An Act to establish the Department of Natural Resources and to amend related Acts was passed by the House of Commons.
- December 1994 - The governments of Canada and the United States set up a bilateral consultative process to discuss forest issues and the North American lumber trade.
- April 1996 - The governments of Canada and the United States signed a new Canada-United States Softwood Lumber Agreement. The United States made a commitment not to initiate trade proceedings against Canadian softwood lumber exports for the next five years. In return, Canada agreed that, when softwood lumber deliveries from British Columbia, Quebec, Ontario and Alberta exceed the 14.7 billion-board-foot annual threshold, the first 650 million board feet exceeding that threshold will be subject to a levy at the border of U.S.\$50 per thousand board feet, and additional quantities subject to a levy of U.S.\$100.**

#### SELECTED BIBLIOGRAPHY

- Bourdages, Jean-Luc. *Sustainable Forest Development: A National Strategy*. BP-318E. Research Branch, Library of Parliament, Ottawa, November 1992, 18 p.
- Bourdages, Jean-Luc. *Paper Recycling in Canada: A New Reality*. BP-356E. Research Branch, Library of Parliament, Ottawa, November 1993, 18 p.
- Bourdages, Jean-Luc and Amyot, Jean-Pierre. *The Canadian Forest: No Future Without Good Management*. BP-99E. Research Branch, Library of Parliament, Ottawa, January 1992, 55 p. and Appendix.
- Canadian Council of Forest Ministers. *Sustainable Forests: A Canadian Commitment*. National Forest Strategy, March 1992, 51 p.
- Canadian Forest Service. *The State of Canada's Forests 1995-1996: Sustaining Forests at Home and Abroad*. Sixth Report to Parliament, Ottawa, 1996, 112 p.

Forestry Canada. *The State of Forestry in Canada 1990 - Report to Parliament*. Ottawa, April 1991, 80 p.

Forestry Canada. *The State of Canada's Forests 1991 - Environmental, Social and Economic Indicators*. Second Report to Parliament, Ottawa, 1992, 85 p.

Forestry Canada. *The State of Canada's Forests 1992*. Third Report to Parliament, Ottawa, 1993, 112 p.

Canadian Forestry Service. *The State of Canada's Forests 1993: Forests, A Global Resource*. Fourth Report to Parliament. Ottawa, 1994, 112 p.

Canadian Forest Service. *The State of Canada's Forests 1994: A Balancing Act*. Fifth Report to Parliament, Ottawa, 1995, 112 p.

Madore, Odette and Jean-Luc Bourdages. *The Canadian Forestry Sector: An Industrial and Technical Profile*. BP-294E. Research Branch, Library of Parliament, Ottawa, April 1992, 25 p.

Natural Resources Canada. *Strategic Outlook 1995-96 to 1997-98*. May 1995, 12 p. and Appendix.

Science Council of Canada. Sectoral Technology Strategy Series. No. 9. *The Canadian Forest Products Sector*. Ottawa, 1992, 33 p.

Standing Committee on Forestry and Fisheries, Sub-Committee on Forestry (Bud Bird, Chairman). *Forests of Canada: The Federal Role*. Ottawa, November 1990, 187 p.

Standing Committee on Natural Resources, (Robert Nault, Chairman). *Canada: A Model Forest Nation in the Making*. Ottawa, June 1994, 75 p.

















